BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF ALFRED A. HEARTLEY

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 030851-TP

DECEMBER 4, 2003

Q. PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH").

A. My name is Alfred A. Heartley. My business address is 754 Peachtree Street, Atlanta, Georgia 30308. My title is General Manager – Wholesale Performance and Regional Centers.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE WITH BELLSOUTH.

A. I graduated from North Carolina State University in 1971 with a BS Degree in Applied Mathematics. I have over 32 years experience in the telecommunications industry working for BellSouth. I have held numerous management positions in BellSouth, including positions involving outside plant engineering and construction, installation and maintenance, central office operations, data processing and process and performance improvement.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to explain how the BellSouth Network Services organization is prepared to scale the network operations to provide seamless, cost-effective hot cuts (whether individual; project; or batch) in the volumes likely to be presented if BellSouth obtains full relief from providing unbundled circuit switching. My testimony will demonstrate that BellSouth's network operations can be scaled both to convert the embedded base of UNE-Ps and to provision the new UNE-L orders that would result from the removal of unbundled circuit switching.

Second, I will demonstrate that the network operations portions of BellSouth's hot cut processes are regional.

Q. WHAT ISSUES ON THE FLORIDA ISSUES LIST DOES YOUR TESTIMONY ADDRESS?

A. My testimony addresses Issues 3(d).

Q. PLEASE EXPLAIN NETWORK SERVICES ROLE IN THE HOT CUT PROCESS.

A. BellSouth provides service to both retail and wholesale customers through its Network Services organization. This department is responsible for performing the actual provisioning, maintenance, and repair of customer services within the nine BellSouth states. Network Services is a single team of employees that

reports to one corporate officer, the President of BellSouth Network Services, who in turn reports to the CEO of BellSouth. These Network employees are organized into common work functions. These work functions are independent of the type of customer – retail, access, or wholesale. The main work functions into which these employees are organized are central office operations, engineering and construction, and installation and maintenance.

In the single or batch Hot Cut process the central office operations employees will perform the actual central office wiring required to perform the hot cut. The installation and maintenance employees will perform any wiring changes required in the outside plant network to perform the hot cut.

I. SCALABILITY OF THE NETWORK OPERATIONS

Q. HOW WILL NETWORK SERVICES HANDLE INCREASED HOT CUT DEMAND WITH CURRENT FORCE IF RELIEF IS GRANTED FROM UNBUNDLED CIRCUIT SWITCHING?

A. Network Services is prepared to move personnel to locations requiring additional staffing if the local employees cannot handle the increased load. As the FCC recognized in BellSouth's section 271 proceedings, BellSouth's network forces and network processes and procedures are regional. Our employees are trained in regional training centers and therefore can be relocated to areas requiring additional staffing when necessary. Our methods and procedures are developed and maintained by a regional staff and therefore minimal training will be required

for any loaned forces. If the additional staffing is required on a permanent basis, Network Services will hire the necessary personnel to handle any increased load.

Q. ARE BELLSOUTH'S NETWORK OPERATIONS SCALABLE?

A. Absolutely. BellSouth has over one hundred years of experience in managing force and load to ensure that it can provide its customers service. Managing force and load for hot cuts to provide UNE loops to BellSouth wholesale customers is no different. Staffing the network forces to meet expected needs is business as usual for BellSouth.

Q. HOW DOES BELLSOUTH MANAGE FORCE AND LOAD?

A. One of the major tools BellSouth uses to manage force and load in both network operations and in its centers is the Force Model. A Force Model allows the user to take certain inputs and generate anticipated volumes and the force needed to handle those volumes.

Q. HAS NETWORK SERVICES DONE A FORCE MODEL TO FORECAST THE ADDITIONAL HOT CUT LOAD THAT WILL BE REQUIRED IF UNE-P RELIEF IS GRANTED?

A. Yes. BellSouth has run force models to forecast the additional load necessary in the centers and in network operations if BellSouth receives relief from unbundled switching. I will discuss the network operations force model and the results of

that model for the network services operation. BellSouth witness Ken Ainsworth discusses the results of the centers force model for the centers personnel.

Q. WHAT ARE SOME OF THE INPUTS THAT GO INTO THE NETWORK FORCE MODEL?

A. Some examples of the network inputs that go into the force model are as follows:

1. Forecast of inward movement and lines in service for various products including 1FR, 1FB, UNE, ADSL, DS1, DS3 etc
2. Assumptions for trouble report rates and dispatch rates
3. Productivity levels
4. Productive vs. non-productive hours
5. Capital expenditures
6. Span of Control

Q. WHAT ASSUMPTIONS DID BELLSOUTH MAKE ABOUT THE VOLUME OF HOT CUTS IF BELLSOUTH OBTAINS RELIEF FROM UNBUNDLED CIRCUIT SWITCHING?

A. BellSouth made various assumptions about the volume of UNE-L in its forecast. In each instance, however, BellSouth took the highest expected volumes to generate a "worst-case" view of UNE-L volume. As I will demonstrate, BellSouth can scale its network forces to meet that "worse-case" scenario.

Q. WHAT DO YOU MEAN BY WORST CASE SCENARIO?

A. By that, I mean the absolute maximum amount of hot cuts that the central office forces and I&M forces would have to handle if the following were to occur:

1. This Commission finds that CLECs are not impaired without unbundled switching (and thus, UNE-Ps) in any market in BellSouth's nine-state region.
2. CLECs decide to convert the totality of their UNE-P base to unbundled loops attached to the CLECs' switches rather than BellSouth's switches.
3. UNE-P growth and UNE-L growth is maintained throughout the relevant period for the absolute highest volumes of each that has occurred at any time in the last 33 months that BellSouth has maintained records.

Q. WHAT MONTHLY VOLUME OF UNE-P TO UNE-L CONVERSIONS RESULTS FROM YOUR ASSUMPTIONS?

A. The worst case monthly volume of hot cuts (except for adjustments to that volume that I will discuss later in this testimony) is 317,998 across the entirety of BellSouth's nine-state region. The following explains how I arrived at that value:

The quantity of UNE-Ps in service across BellSouth's nine-state region was about 2.21 million at the end of October 2003. The highest single-month volume of UNE-Ps added (116,295) occurred in June 2002. The highest single-month volume of UNE-Ls inward movement (19,029) occurred in January 2001. The pictorial in Exhibit KLA-3, which is attached to Ken Ainsworth's testimony, depicts how those volumes grow over time.

Following is a brief explanation:

In October 2003, there were about 2.21million UNE-Ps in service. Projecting forward for nine (9) months to July 2004 (the earliest expected decision by a Public Service Commission in BellSouth's region), there would be 3.26 million UNE-Ps in service (2.21M + (9 * 116,295). However, because the conversion of a BellSouth retail account to a UNE-P arrangement does not require a hot cut, the monthly volume expected in July 2004 is equal to the quantity of "stand-alone" unbundled loops requested (19,029).

Assuming that in July 2004, all nine Commissions in BellSouth's region decided that CLECs are not impaired without unbundled switching and that CLECs may continue to request UNE-Ps for an additional five (5) months, the expected quantity of UNEP-s in service in December 2004 would be 3.84 million. This level of UNE-Ps becomes the "embedded base" which later will be converted to stand-alone unbundled loops via the hot cut process. For the next eight (8) months, the monthly volume of hot cuts would rise to 135,324. This is the sum of the worst case unbundled loop volume (19,029) plus the worst case monthly growth for UNE-Ps (116,295) that now would be unbundled loops also.

Beginning in August 2005, BellSouth would begin the transition of the embedded base of UNE-Ps (3.84 million) plus handle the worst case monthly unbundled loop volume (19,029) and the worst case monthly UNE-P growth volume (116,295). During each of the subsequent seven-month intervals, BellSouth would migrate one third of the embedded base. Thus, the worst case monthly hot cut volume at the region level would be 317,998 (that is, 19,029 + 116,295 +

((3.84M * 0.333)/7))

Because on average there are 22.3 business days per month, the daily volume becomes 14,260 (that is, 317,998 / 22.3) at the regional level.

Q. WHAT OTHER ADJUSTMENTS TO ANTICIPATED VOLUMES HAVE YOU ASSUMED?

A. During CLEC workshops, CLECs have suggested that two adjustments to anticipated volumes should be made. While I do not necessarily agree with such a suggestion, I have included those adjustments to prove my point that BellSouth can enlarge its LCSC and CWINS groups to handle even worst case volumes with these additional factors considered. The two adjustments suggested are to increase the volumes to include some level of "churn" from one local carrier to another and to increase the volumes to include some level of increased trouble report rate for unbundled loops compared to UNE-P arrangements. Accordingly, I made an upward adjustment of 4% churn per month (48%) per year and an upward adjustment of 5% increased trouble report rate. I treated these adjustments as if they resulted in additional hot cuts (again, a worst case assumption) and the resultant monthly volume for hot cuts rose to 347,254 per month (15,572 per business day).

Q. DID BELLSOUTH FACTOR DISPATCHES AS A RESULT OF IDLC INTO ITS FORCE MODEL?

A. Yes. The model includes the percent of IDLC in each central office. Employees in our installation and maintenance operations perform hot cuts when IDLC is involved. These employees will be involved in hot cuts when we have to change the outside plant facility, such as converting a loop from integrated digital loop carrier (IDLC) to non integrated DLC or a copper pair. This will vary by central office and facility availability.

Q. DID BELLSOUTH CONSIDER COORDINATED VERSUS NON-COORDINATED CUTS IN THE MODEL?

A. Yes. Network Services staff considered the percent of conversions and ongoing activity that would go to SL1s and SL2s and the percent that would be coordinated and non-coordinated.

Q. ONCE YOU HAVE THE LOAD PROJECTIONS, HOW DO YOU USE THEM?

A. The load projections were multiplied by the amount of time required in the central office and field to complete the wiring and perform the hot cuts. We calculated the time projections based on wiring and cutting one line per order. This method yielded the largest number of employees required. We anticipate that when the conversions do occur, there will be some efficiency gained when multiple hot cuts can be performed at the same location.

Q. USING THESE ASSUMPTIONS, WHAT FORCE AND LOAD DID THE MODEL GENERATE?

A. The model generated a load of a maximum of 277 hot cuts in a central office per business day. Exhibit AH-1 sets forth the expected load per day per central office in Florida. Based on this load, the model yielded a force increase of an additional 687 central office employees in Florida and an additional 394 installation and maintenance employees.

Q. COULD BELLSOUTH HIRE 687 CENTRAL OFFICE EMPLOYEES AND 394 INSTALLATION AND MAINTENANCE EMPLOYEES?

A. Absolutely. Again, force and load management is something BellSouth has been doing for decades. BellSouth would hire the additional force by engaging its Human Resources Department. Human Resources would advertise the jobs in local media and conduct job fairs and testing events to screen applicants. Human Resources would require 90 days from notification to employees being added to the payroll.

Q. WHERE WOULD BELLSOUTH FIND THIS KIND OF WORKFORCE?

A. BellSouth will find these potential employees in technical schools, military bases and other colleges. Based on the amount of downsizing that has occurred in the industry, many applicants may be looking for technical jobs like we will have.

Q. COULD BELLSOUTH TRAIN 687 NEW CENTRAL OFFICE EMPLOYEES AND 394 NEW INSTALLATION AND MAINTENANCE EMPLOYEES SUFFICIENTLY TO PERFORM HIGH QUALITY HOT CUTS?

A. Absolutely. First, as Mr. Ainsworth explains in his testimony, hot cuts are not difficult. Consequently, BellSouth's basic training will permit employees to perform the hot cut functions. BellSouth trains new employees through its region-wide training program. Technical training is developed and delivered by a centralized BellSouth Training organization that operates training facilities in 5 locations scattered throughout the nine-state region. These training locations are staffed with 35 people and are supplemented by contract trainers as needed. Approximately 70% of the training is performed at the training centers with the remaining 30% being "suitcased" to the various locations throughout the nine-state region. Technical personnel throughout the nine-states attend training at all of these locations depending on the subject matter and class sizes. Because the training is identical, it is irrelevant which location is selected. Training is divided by subject matter, not by state. Consequently, BellSouth has more than enough training facilities to train these new network employees.

The training necessary to perform hot cuts will typically take between 15 to 35 days of mandatory training. In addition, employees receive on-the-job training related to their work assignments.

Q. BASED ON THIS HIRING AND TRAINING PLAN, HOW LONG WOULD IT TAKE FOR BELLSOUTH TO FIND CANDIDATES, HIRE THEM, TRAIN THEM, AND HAVE THEM ON THE JOB PERFORMING HOT CUTS?

A. BellSouth would required 4 to 5 months to hire, train and place job applicants on the job and have them performing high quality hot cuts.

Q. DOES BELLSOUTH HAVE TO HIRE ALL OF THESE PEOPLE AT ONCE?

A. No. The transition period in the order is almost 2 years. So BellSouth has an extended period over which to add and train the force additions.

Q. HAS BELLSOUTH HAD TO INCREASE FORCE IN THE PAST TO HANDLE LARGE CONVERSIONS OR WORKLOADS?

A. BellSouth has formed cutover teams in the past to handle central office conversions, the 1996 Summer Olympic Games in Atlanta. We have also hired and trained temporary employees to help handle the increased summer workload. For example, BellSouth hired and trained 1000 Service Technicians in 1999 to handle our service order and trouble load and to reduce overtime. During 1998 to 2001 we hired over 3300 employees related to ENCORE and Wholesale Operations. During 2001 and 2002 we hired over 800 Service Technicians to handle increased ADSL demand. We organize our training around the tasks to be performed and focus our force on those tasks. We anticipate that the hot cuts generated by UNE-P relief will require teams of employees performing specific tasks for up to 21 months. We also anticipate that we will be able to supplement existing force in an area with employees from other areas and to hire the necessary force to accomplish our goal in the required timeframe.

Q. ARE THERE ANY INHERENT LIMITATIONS IN THE NUMBER OF HOT CUTS THAT CAN BE PERFORMED IN A CENTRAL OFFICE IN A SINGLE DAY?

A. There are no limitations that BellSouth cannot manage around. Loop conversion work is just part of the overall work done on a daily basis in any given central office. Depending on the workload and lay out of the central office, anywhere from 2 to 10 (or more) central office technicians may be at work simultaneously on the same Main Distributing Frame ("MDF") with no negative impact on productivity. Cable pairs are deployed on the MDF as cables are brought into the central office. Moreover, when multiple loop conversions are scheduled in a single day for a single central office, the pre-wiring work may be done over several shifts in the days leading up to the due date. Because the access lines for these conversions are generally spread throughout the central office, the actual cutovers are then accomplished without technicians interfering in each other's workspace. Finally, large hot cut quantities are project-managed. One of the benefits of project-management is to schedule the central office forces such that both the pre-wiring and the due date work can be accomplished without space constraints.

II. REGIONALITY

Q. IS BELLSOUTH'S HOT CUT PROCESS REGIONAL?

A. Yes. As the FCC confirmed in BellSouth's section 271 applications, BellSouth's network operations are regional. Thus, BellSouth's Network services operations personnel perform the hot cut processes the same way in all nine of BellSouth's states.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

Top 20 Florida Wire Centers List

Worst Case Force Projection

Percentage of UNEPs that will convert to UNEL	100%
Business days per month	22.3
Regional growth UNEPs per month	116,295
Regional IM UNELs per month	19,029
Churn percentage per year	48%
Maintenance and Repair Report Rate increase per month	5%

Daily Conversion % to SL1 Non-Coordinated	50.00%
Daily Conversion % to SL1 Coordinated	25.00%
Daily Conversion % to SL2 (Coordinated)	25.00%

CO Cutover Times (Hours)	First Line (Worst Case)	Additional Line
CO Time SL1 Non Coordinated	0.43333	0.30000
CO Time SL1 Coordinated	0.60000	0.33333
CO Time SL2 (Coordinated)	1.05000	0.63333

Outside Tech Cutover Hours per Dispatch 1.0000

No new UNEP.
Only new UNE-L.

STATE	W/C	I&M Work Center	% of Total UNE-Ps	% IDLC	UNE-P Growth per Month	UNE-L Growth per Month	Total UNE-P Dec. 2004	Monthly UNE-P to UNE-L Conversions plus Normal UNE-P and UNE-L Growth	Daily UNE-P to UNE-L Conversions	Daily Conversions Requiring Outside Dispatch	Daily Conversions to SL1 Non-Coordinated	Daily Conversions to SL1 Coordinated	Daily Conversions to SL2 (Coordinated)	CO Transfer Man-Hours	Outside Transfer Man-Hours
FL	hlwdflpe	61 NW 98 AVE./ 139(	1.25174%	82%	1,456	238	48,042	3,979	277	229	139	69	69	174.47	228.50
FL	miamflhl	13305 NW 45 AVENL	0.81674%	51%	950	155	31,347	2,596	181	92	90	45	45	113.84	91.70
FL	hlwdflwh	250 SW 62 AVE.	0.81249%	21%	945	155	31,183	2,583	180	38	90	45	45	113.25	38.36
FL	prmflma	10330 SW 184 St., F	0.68049%	47%	791	129	26,117	2,163	151	71	75	38	38	94.85	70.92
FL	pmbhflcs	9500 Royal Palm Blvc	0.54365%	56%	632	103	20,865	1,728	120	67	60	30	30	75.78	67.10
FL	wpbhflga	1201 Barnett Dr, Lake	0.53062%	51%	617	101	20,365	1,687	118	60	59	29	29	73.96	60.41
FL	miamflca	12800 SW 56 St. Miai	0.52962%	46%	616	101	20,327	1,684	117	54	59	29	29	73.82	54.17
FL	fldflca	4200 W. Oakland Pk.	0.50691%	14%	590	96	19,455	1,611	112	16	56	28	28	70.65	16.02
FL	pmbhflma	1180 Banks Rd., Marg	0.48107%	37%	559	92	18,463	1,529	107	40	53	27	27	67.05	39.91
FL	ndadflbr	19051 N.E 3RD CT.	0.46745%	42%	544	89	17,941	1,486	104	44	52	26	26	65.15	43.61
FL	orldflph	5120 SilverStar Road	0.42568%	63%	495	81	16,338	1,353	94	59	47	24	24	59.33	59.46
FL	fldflpl	4401 DAVIE BLVD.-F	0.42563%	27%	495	81	16,336	1,353	94	26	47	24	24	59.33	25.65
FL	miamflwd	12800 SW 56 St. Miai	0.40957%	55%	476	78	15,719	1,302	91	50	45	23	23	57.09	49.88
FL	fldflja	10141 W BROWARD	0.40898%	54%	476	78	15,697	1,300	91	49	45	23	23	57.00	48.76
FL	ndadflac	19051 N.E 3RD CT.	0.40441%	8%	470	77	15,521	1,286	90	7	45	22	22	56.37	7.14
FL	bybhflma	321 SE 2nd St, Delray	0.40333%	56%	469	77	15,480	1,282	89	50	45	22	22	56.22	49.59
FL	pmbhflfe	1117 NE 3rd Ave., Po	0.37418%	21%	435	71	14,361	1,190	83	17	41	21	21	52.15	17.44
FL	hlwdflma	715 N. FEDERAL HW	0.37360%	17%	434	71	14,339	1,188	83	14	41	21	21	52.07	14.06
FL	fldflmr	201 S.W. 14 STREET	0.36581%	17%	425	70	14,040	1,163	81	14	41	20	20	50.99	14.13
FL	ndadflgg	19051 N.E 3RD CT.	0.35925%	13%	418	68	13,788	1,142	80	10	40	20	20	50.07	10.27
FL	miamflpl	9090 NW 41 Street	0.35251%	62%	410	67	13,529	1,121	78	48	39	20	20	49.13	48.29
FL	miamflsh	8451 NE AVE	0.35043%	0%	408	67	13,449	1,114	78	0	39	19	19	48.84	0.06
FL	bcrtflma	6037 W. Atlantic Ave,	0.34848%	39%	405	66	13,375	1,108	77	30	39	19	19	48.57	30.37
	Florida Total		**28.86247%**	**36%**	**33,566**	**5,492**	**1,107,743**	**91,755**	**6,394**	**2,306**	**3,197**	**1,599**	**1,599**	**4,023**	**2,306**

Headcount	536	307
Add Undistributed	644	369
Supervisors 15/1	43	25
Totals	687	394
Total Force	1080	